

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

CORTEVA AGRISCIENCE LLC,
PIONEER HI-BRED INTERNATIONAL,
INC., and AGRIGENETICS, INC.,

Plaintiffs,

C.A. No. 23-1059 (JFM)

v.

INARI AGRICULTURE, INC. and INARI
AGRICULTURE NV,

Defendants.

PLAINTIFFS' REPLY CLAIM CONSTRUCTION BRIEF

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I. PRELIMINARY STATEMENT

Inari Agriculture, Inc. and Inari Agriculture NV (collectively, “Inari”) take shortcuts. They seek to commercialize seed products containing transgenic “events,” but are not willing to invest the time and capital to develop their own original events. Instead, Inari deceitfully acquired seeds containing Corteva’s events subject to the Asserted Patents and exported them to Belgium. There, Inari grew them into plants and used its gene-editing capabilities to remove small, immaterial portions of event DNA with the goal of commercializing the modified versions.

That is the lens through which to view Inari’s positions. Inari’s constructions are inconsistent with the intrinsic evidence and plain meaning, and designed to manufacture strained non-infringement arguments. The Court should reject them.

II. ARGUMENT

A. “DNA construct” (‘434 patent, cls. 1-2, 5, 8)

Corteva’s Construction	Inari’s Construction
Plain and ordinary meaning, which is assembly of DNA molecules linked together	A DNA construct comprising the first, second, third, and fourth expression cassettes (recited in claim 1) flanked by SEQ ID NO: 27 on the 5’ end and SEQ ID NO: 28 on the 3’ end.

Inari ignores the specification’s definition of “DNA construct” and instead adds limitations from the claim body without ever defining “DNA construct.” Inserting Inari’s construction (bold italics) into claim 1 yields confusion and redundancy because every part is recited elsewhere in the claim:

*A [a] DNA construct comprising the **first, second, third, and fourth** expression cassettes (recited in claim 1) **flanked by SEQ ID NO:27 on the 5’ end and SEQ ID NO:28 on the 3’ end** comprising: a **first, second, third, and fourth** expression cassette...wherein the four cassettes are **flanked by SEQ ID NO:27 at the 5’ end and SEQ ID NO:28 at the 3’ end.***¹

¹ Emphasis added unless otherwise noted.

Inari's justification for this centers on a misinterpretation of an Examiner's amendment. The Examiner did not provide an express interpretation of "DNA construct" in his amendment. In allowing the claims initially, he noted:

The event is described as a ***DNA construct comprising four operably linked cassettes*** comprising three Cry toxins and a phosphinothricin resistance gene, ***wherein the construct is flanked SEQ ID NO:27 and 28 (20mers) in a corn plant.***

D.I. 209-8 (Feb. 4, 2013 Non-Final Office Action) at 11. There would have been no reason to state that "the construct is flanked" by SEQ IDs:27-28 if the Examiner understood "DNA construct" itself to also include those sequences.

Inari emphasizes the following portion of the amendment, with deleted language stricken and added language underlined:

A DNA construct comprising: a first, second, third and fourth expression cassette...wherein the ~~DNA construct is~~ four cassettes are flanked by the 5' junction sequence of SEQ ID NO:27 at the 5' end and the 3' junction sequence of SEQ ID NO:28 at the 3' end.

D.I. 240-2 (July 1, 2013 Notice of Allowance) at 3-4. According to Inari, this "unequivocally establishes" that "DNA construct" includes SEQ IDs:27-28. D.I. 239 (Answering Br.) at 6. But where the Examiner struck "DNA construct" language in the claim body, he inserted "four cassettes." Where he struck "the 5' junction sequence" and "the 3' junction sequence," he added "at the 5' end" and "at the 3' end," respectively. All this "unequivocally establishes" is the Examiner understood "DNA construct" to comprise the four cassettes, and the construct is flanked by SEQ IDs:27-28.

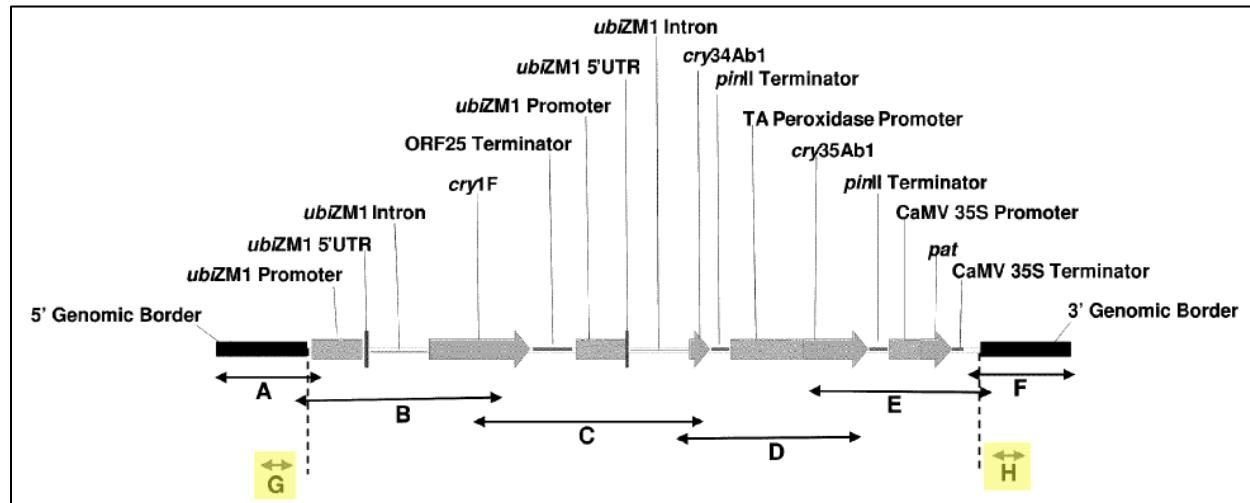
Inari contends that its construction "accords with the Examiner's obviousness rejection..." *Id.* But claim 1 recites in the "wherein" clause the same limitations Inari seeks to inject into the preamble. Inari never explains why they must be duplicated.

B. “corn event DP-004114-3” (’434 patent, cl. 5-6, 8, 14-15)

Corteva’s Construction	Inari’s Construction
“a Cry1F-encoding expression cassette, a Cry34Ab1-encoding expression cassette, a Cry35Ab1-encoding expression cassette, and a pat-encoding expression cassette, located between SEQ ID NO: 27 at the 5’ end and SEQ ID NO: 28 at the 3’ end”	The complete sequence of the insert and flanking regions of event DP-004114-3, as disclosed in SEQ ID NO: 6, which includes the four cassettes disclosed in Claim 1 flanked by SEQ ID NO: 27 at the 5’ end and SEQ ID NO: 28 at the 3’ end.

Inari agrees “corn event DP-004114-3” includes four expression cassettes and SEQ IDs:27-28. *Id.* at 7-8, 10. It concedes that the Examiner indicated that “SEQ ID NOS: 27 and 28 *distinguished* event DP-004114-3” and that Corteva included SEQ IDs:27-28 “to *distinguish* from the prior art and enable the claims.” *Id.* at 10. But confusingly, Inari also claims that SEQ ID:6—which includes an additional 4,807 nucleotides (D.I. 208 (Opening Br.) at 10)—“is the DNA sequence that defines DP-004114-3 and *distinguishes* it from other transgenic corn ‘events.’” D.I. 239 (Answering Br.) at 9.

Those additional nucleotides are part of the “[g]enomic border” sequences depicted in solid black in the patent’s Figure 5 (annotated below):



“G” and “H” are fragments that “represent the 5’ and 3’ genomic border regions, respectively,” and “[t]he vertical dash line represents the genomic border/*insert junctions*.” D.I. 209-2 (’434 patent),

5:54-56. G and H “were generated from both 4114 maize and control maize,” confirming they are “of maize genomic origin.” *Id.*, 36:34-40. In other words, G, H, and the remainder of the border regions outside the dash lines are present regardless of DP-004114-3; they are not specific to DP-004114-3. It is the junction sequences (dashed lines) that are unique.

SEQ IDs:27-28 are “junction sequences”: the junction points between the “[unmodified] maize genomic DNA and the 5’ end of the [transgenic] insert” and “3’ end of the [transgenic] insert and [unmodified] maize genomic DNA.” *Id.*, 8:31-36. They support the patent’s method of detecting DP-004114-3 because DNA probes comprising junction sequences are “unique to the event.” *Id.*, 4:15-27. SEQ ID:6 contains maize-genomic regions that are not “unique to the event.” They are “of maize genomic origin” and are present regardless of the presence of DP-004114-3.

Inari contends that the Applicant “argu[ed] that the ‘4114 maize genomic sequence’ is that of SEQ ID NO:6.” D.I. 239 (Answering Br.) at 8-9. The Applicant did not argue that DP-004114-3 is SEQ ID:6. Rather, responding to an enablement rejection, the Applicant stated that it “respectfully disagrees with this position of the Examiner on the enablement of the specification for *the genotype of the corn even[t] DP-004114-3 wherein the genotype comprises the four expression cassettes flanked by SEQ ID NO:27 and 28.*” D.I. 209-9 (May 2, 2013 Response to Non-Final Office Action) at 14. Regarding the genomic border regions, the Applicant explained they “were verified to be *of maize origin* [non-transgenic]...from both 4114 maize and control maize plants.” *Id.*

Inari also relies on claim 26. D.I. 239 (Answering Br.) at 9-10. But claim 26 recites “corn event DP-004114-3” and “SEQ ID NO:6” in the same claim, strongly suggesting they are distinct limitations. D.I. 208 (Opening Br.) at 10. All a skilled person would gather from claim 26 is that crossbreeding *some* DP-004114-3 plants with other plants *can* result in progeny that comprise

SEQ ID:6, not that DP-004114-3 *is* SEQ ID:6.²

C. “the genotype of the corn event DP-004114-3” (’434 patent, cl. 5-6)

Corteva’s Construction	Inari’s Construction
Plain and ordinary meaning, which is the genetic constitution of the corn event DP-004114-3	The complete sequence of the insert and flanking regions of event DP-004114-3, as disclosed in SEQ ID NO: 6, which includes the four cassettes disclosed in Claim 1 flanked by SEQ ID NO: 27 at the 5’ end and SEQ ID NO: 28 at the 3’ end.

Inari has altered its construction from the Joint Claim Construction Chart. D.I. 209-1 at 11.

It argues, without evidence, that the constructions of this term and “corn event DP-004114-3” are “indistinguishable.” D.I. 239 (Answering Br.) at 7. Inari never explains why the Applicant used two different terms if they are “indistinguishable.” The Court should adopt Corteva’s construction for the reasons previously discussed. D.I. 208 (Opening Br.) at 12.

² Inari observes that “[c]laim 1 is to a DNA construct and does not recite event DP-004114-3 or the ‘genotype of corn event DP-00411[4]-3.’” D.I. 239 (Answering Br.) at 10. Under Corteva’s constructions, “DNA construct” is a broad term whereas DP-004114-3 is a specific event. They are not the same, although one can have a DNA construct that comprises DP-004114-3.

D. “flanked by” ('434 patent, cl. 1; '378 patent, cl. 1)

Corteva's Construction	Inari's Construction
Plain and ordinary meaning, which is joined or connected at the side to	Adjacent to

Inari submits that “there is no appreciable difference between the parties’ constructions.” D.I. 239 (Answering Br.) at 10. Inari is welcome to adopt Corteva’s construction. The specification uses “adjacent” and “flanking” together to describe certain DNA sequences (D.I. 209-2, 17:9-10 (“adjacent flanking DNA sequence”)), which would be unnecessary if “flanking” always means “adjacent.” D.I. 208 (Opening Br.) at 13-14. Inari asserts that “Corteva’s proposed construction would...require the flanking sequence is *always* ‘joined or connected’ to the inserted DNA.” D.I. 239 (Answering Br.) at 11 (emphasis in original). But DNA sequences that flank an inserted sequence are joined or connected to that sequence by chemical bonds.

In the patents, it is not the case that flanking DNA is always “adjacent to” inserted DNA. Inari claims that its construction “uses the exact language of the patent specification...” *Id.* at 11. But the patent never defines “flanked by.” Inari imports one limitation from the specification (“adjacent to”) while excluding the specification’s alternatives of “immediately adjacent to” or no location requirement. D.I. 208 (Opening Br.) at 13-14. Importing one limitation from the specification, particularly while ignoring other variants of “flanking” DNA, is improper.

E. “derived from” ('434 patent, cl. 14)

Corteva's Construction	Inari's Construction
Plain and ordinary meaning, which is formed or developed out of	Extracted or processed from.

The specification uses “derived from” in three contexts that are encompassed by Corteva’s construction, only one of which is captured by Inari’s. D.I. 208 (Opening Br.) at 14. Inari counters that “Corteva’s examples from the specification *have no relevance* to the use of the term...” D.I. 239 (Answering Br.) at 12. These examples include “...corn plants derived from

transformation and plants, and plant cells and *seeds* derived from patent deposit ATCC PTA-11506.” *Id.* But claim 15 depends from claim 14 and recites that the “biological sample comprise[s] *plant*, tissue, or *seed*...” Claim 14’s biological sample can be plant, tissue, or seed, and thus Corteva’s examples are squarely relevant.

Inari contends that “...for the biological sample to be useful...it must be extracted from or processed so that the nucleic acid can be detected...” *Id.* This assumes that claim 14’s “biological sample” is a nucleic acid, but as discussed above, claim 14 is not so limited. Limiting “derived from” to mean “extracted or processed from” makes nonsense out of the claims because a “plant” of claim 15 cannot be “extracted or processed from” a “plant, tissue, or seed” of claim 14. Plants and tissues can, however, be “formed or developed out of” a seed, for example, by sowing the seed and growing plants containing tissues. Seeds can be “formed or developed out of” plants, for example, by growing plants such that they produce seeds.

F. “wherein said sample comprises a nucleotide sequence selected from the group consisting of SEQ ID NO: 27 and SEQ ID NO: 28, or the complement thereof” (‘434 patent, cl. 14)

Corteva’s Construction	Inari’s Original Construction
This language should be interpreted as a Markush group, which is “wherein said sample comprises a nucleotide sequence comprising any of: SEQ ID NO: 27, the complement of SEQ ID NO: 27, SEQ ID NO: 28, or the complement of SEQ ID NO: 28”	Plain and ordinary meaning, which is “wherein the sample comprises in its DNA a nucleotide sequence selected from the group consisting of SEQ ID NO: 27, or the complement thereof, located at the 3’ end of the insert and SEQ ID NO: 28, or the complement thereof, located at the 5’ end of the insert.”

Inari “does not object to Corteva’s construction,” but also states, without basis, that “claim 14 is to a two member Markush group.” *Id.* at 13. This is not Corteva’s position, and the Court should adopt Corteva’s construction as written. The Court also should reject Inari’s attempt to substantively “revise” its construction at the eleventh hour. *Id.*

Claim 14 permits a selection of any of the four alternatives in Corteva’s construction. This

is simply the *Markush* group expanded to a list. It also comports with the specification and the remainder of claim 14. Claim 14 relates to methods of detecting at least one of SEQ ID:27, SEQ ID:28, or their respective complements in “[a] biological sample.” When the specification refers to “biological samples,” it does so in the context of event-detection methods. D.I. 209-2 (’434 patent), 3:52-61, 4:28-30, 4:56-5:3, 12:36-43, 13:4-14. This includes detecting junction sequences SEQ ID:27 *or* 28. *Id.*, 8:31-36. The specification explains that those methods identify the event by recognizing *one or both* junction sequences. *Id.*, 4:31-36 (“DNA molecules are provided that comprise *at least one* junction sequence of DP-004114-3...and is diagnostic for the DP-004114-3 event”); 3:41-61 (describing methods involving “the 5’ and/*or* 3’ flanking sequence of DP-004114-3”), 4:56-63 (describing kits for identifying DP-004114-3 that recognize “the 5’ *or* 3’ flanking region of DP-004114-3”). Inari’s construction appears to require that *both* SEQ IDs 27-28 (or both their respective complements) be present. That is wrong under the plain meaning of the *Markush* language and inconsistent with the specification recognizing one or both junction sequences is sufficient.

G. “wherein: (a) said flanking region comprises a nucleotide sequence selected from the group consisting of the nucleotide sequence set forth in SEQ ID NO: 19 and the nucleotide sequence set forth in SEQ ID NO: 20” (’246 patent, cl. 1)

Corteva’s Construction	Inari’s Construction
This language should be interpreted as a Markush group, which is “wherein (a) said flanking region comprises a nucleotide sequence comprising SEQ ID NO: 19 or SEQ ID NO: 20”	Wherein the nucleotide sequence SEQ ID NO: 19 is linked to and contiguous with the 5’ end of the DNA construct and the nucleotide sequence SEQ ID NO: 20 is linked to and contiguous with the 3’ end of the DNA construct.

Inari “does not dispute that [the disputed term] is directed to a two member Markush group” and claims it “does not construe the claim as a non-Markush claim requiring two flanking regions...” D.I. 239 (Answering Br.) at 13-14. But Inari has not revised its construction to concede

that the disputed term is a *Markush* group that requires one, not both, of SEQ IDs 19-20. The patent describes methods of identifying an event that require identifying one *or* both SEQ IDs:19-20. D.I. 209-3 ('246 patent), 4:2-5 (“the invention relates to the 5’ and/*or* 3’ flanking regions of DAS-59122-7...which can be used for the development of specific primers and probes.”).

Inari attempts to bolster its construction with two strawmen. First, it states that it “is not proposing that the DNA construct must have only one flanking region.” D.I. 239 (Answering Br.) at 14. Nor does Corteva. Second, Inari tries to justify adding limitations based on a purportedly “inoperative embodiment.” *Id.* But the Federal Circuit “ha[s] instructed that it is nonetheless improper to add limitations to constructions to exclude only certain inoperable embodiments.” *Network-1 Techs., Inc. v. Hewlett-Packard Co.*, 981 F.3d 1015, 1025 (Fed. Cir. 2020).

If the Court adopts Inari’s constructions, the result will confuse the jury. Inari’s construction of the disputed term includes “linked,” for which Inari has proposed a separate construction. *See infra*. Claim 1, with Inari’s construction of the disputed term in red and its construction of “linked” in blue, recites:

A corn plant comprising in its genome a DNA construct *contiguous with* to at least one flanking region, *[w]herein the nucleotide sequence SEQ ID NO: 19 is contiguous with to and contiguous with the 5’ end of the DNA construct and the nucleotide sequence SEQ ID NO: 20 is contiguous with to and contiguous with the 3’ end of the DNA construct.*

The redundancy that Inari introduces into the claims is manifest, rendering the claims gibberish.

H. “linked” ('246 patent, cl. 1, 3)

Corteva’s Construction	Inari’s Construction
Plain and ordinary meaning, which is joined or connected	Contiguous with.

Although the patent never defines “linked,” Inari centers a lexicography argument on the patent’s definition for a different term: “flanking region.” But that definition does not use “linked.”

D.I. 209-3, 8:33-39. Inari thus mixes two different concepts to try to bootstrap a construction of “linked” using a distinct definition that never mentions the term. That “flanking region” and “linked” have distinct meanings is clear from the claim language, which uses both terms: “...a DNA construct *linked* to at least one *flanking region*...”

Additionally, the patent’s definition of “operably linked,” which requires sequences be “contiguous,” strongly signals that “linked” need not mean “contiguous.” D.I. 208 (Opening Br.) at 18. Inari mischaracterizes Corteva’s position, contending that “Corteva argues that ‘linked,’ as used in the specification, refers only to operably linked components in the DNA construct...” D.I. 239 (Answering Br.) at 15. That has never been Corteva’s position. D.I. 208 (Opening Br.) at 17-18.

“Linked” is used in the specification in its plain and ordinary sense of “joined or connected.” This is shown at least by the patent’s definition of “DNA construct.” D.I. 209-3, 9:57-58. Inserting Corteva’s construction in place of “linked” yields: “an assembly of DNA molecules *joined or connected* together.” Inari’s construction yields nonsense: “an assembly of DNA molecules *contiguous with* together that provide one or more expression cassettes.”

I. “a polynucleotide that encodes a protein having aryloxyalkanoate dioxygenase activity” (’522 patent, cl. 1)

Corteva’s Construction	Inari’s Construction
Plain and ordinary meaning. A polynucleotide is a polymeric molecule composed of multiple nucleotides. A protein having aryloxyalkanoate dioxygenase activity is a protein with the ability to degrade or diminish the activity of an aryloxyalkanoate herbicide.	Activity capable of degrading phenoxyacetate auxin and pyridyloxyacetate auxin herbicides to confer resistance to a plant to such herbicides.

This is not the first time Inari has attempted to construe “aryloxyalkanoate dioxygenase activity.” In 2022, Inari filed a Request for *Ex Parte* Reexamination of the ’522 patent. Ex. O (Reexam Request). There, Inari argued that “aryloxyalkanoate dioxygenase activity” “is an

‘activity that catalyzes degradation of a herbicidal compound selected from the group consisting of a **phenoxypropionic** auxin and a phenoxyacetic auxin.’” *Id.* at 16. This is different from Inari’s current construction in at least three ways. First, it identifies a different class of herbicides (“phenoxypropionic auxin”) in place of “pyridyloxyacetate auxin.” Second, it reads in a *Markush* group (“a herbicidal compound selected from the group consisting of...”) that does not include one of the types of herbicides (“pyridyloxyacetate auxin”) Inari now proposes is required. Third, it does not require that the claimed activity be “capable of...confer[ring] resistance to a plant to such herbicides.” Inari offers no explanation for its dramatically shifting claim-construction positions. In any event, Inari’s current proposed construction is too narrow.

Inari misinterprets Corteva’s construction, stating that it would require degradation of “**only one** aryloxyalkanoate herbicide such as 2,4-D.” D.I. 239 (Answering Br.) at 17. The ability to degrade “**an** aryloxyalkanoate herbicide” is required, but if a protein can degrade more than one, it still degrades “an” aryloxyalkanoate herbicide. The specification supports this, stating that the “invention also relates in part to identification and uses of genes encoding an aryloxyalkanoate dioxygenase degrading enzyme (AAD-12) capable of degrading phenoxy **and/or** pyridyloxy auxin herbicides.” *E.g.*, D.I. 209-4 (’522 patent), 12:26-29.

Under its reading of Corteva’s construction, Inari contends that “such an activity would read on all the existing transgenic plants transformed with a gene encoding 2,4-D degrading enzymes in the prior art.” D.I. 239 (Answering Br.) at 17. Wrong. Claim 1 also requires that the protein exhibiting such activity “ha[ve] at least 95% amino acid sequence identity with a sequence selected from the group consisting of SEQ ID NO:2 and SEQ ID NO:4.” Inari does not suggest that any (much less “all”) prior-art plants would satisfy all of claim 1.

Inari argues, but does not explain why, Corteva’s reliance on the “other patents in the same

family” is “inapposite.” *Id.* at 17. It also baldly states that “[c]laim 3...does not inform the definition of the patented polynucleotide itself,” *id.* at 17-18, even though claim 3 establishes that Inari’s construction imposes a functional requirement on the polynucleotide that only can be met by an entire plant. D.I. 208 (Opening Br.) at 19-20.

The Applicant knew how to claim dual-resistance limitations like Inari seeks to inject into the claims—it did so in claims of other patent-family members. *Id.* at 20-21. But there, limitations for the same term—“aryloxyalkanoate dioxygenase activity”—were *broader* than the construction Inari now proposes. One of those limitations recites “a protein having *aryloxyalkanoate dioxygenase activity*, wherein the protein enzymatically degrades *phenoxy auxin* and *pyridyloxy auxin* herbicides...” D.I. 209-13, cls. 21-22. Phenoxy and pyridyloxy auxins are *broader* categories of herbicides than the phenoxy*acetate* and pyridyloxy*acetate* auxins to which Inari now tries to narrow “aryloxyalkanoate dioxygenase activity.” *Id.*, cl. 8 (“wherein said pyridyloxy auxin herbicide comprises one or more pyridyloxyacetate herbicides”). It cannot be that “aryloxyalkanoate dioxygenase activity” has a narrower meaning here than the “wherein” clauses that characterize the same term in another family member.

Inari suggests that the prosecution history supports its construction in two ways, neither of which amount to a “clear and unmistakable disclaimer” by the Applicant. *Massachusetts Inst. of Tech. v. Shire Pharm., Inc.*, 839 F.3d 1111, 1119 (Fed. Cir. 2016). First, Inari contends that, “to overcome rejections...Corteva emphasized the experiments in Example 14.” D.I. 239 (Answering Br.) at 16. Emphasis is not disclaimer, and Inari fails to recognize that Corteva also emphasized the percent-identity limitation in the claims. *E.g.*, D.I. 240-4 (Oct. 14, 2011 Resp. to Non-Final Office Action) at 6 (“In light of the percent identity ranges...this rejection should be moot.”); 839 F.3d at 1120 (“it is important to consider the statements made by the applicant both in the

context of the entire prosecution history and the then-pending claims”).

Second, Inari contends that the '522 and '055 claims are “not patentably distinct” and observes that “[inventor] Wright represented that ‘[a]t the time of invention, no other a-KG dioxygenase enzymes had been reported to render the plants resistant to a phenoxyacetic acid herbicide (such as 2,4-D) and one or more pyridyloxyacetate herbicides such as triclopyr and fluoroxypr.” D.I. 239 (Answering Br.) at 18-19. But when the Applicant submitted Wright’s declaration, the claims recited “wherein said activity enzymatically degrades a phenoxy auxin herbicide **and** a pyridyloxy auxin herbicide.” D.I. 240-9 (Aug. 3, 2021 Resp. to Non-Final Office Action) at 2. Wright simply was responding to the pending claims’ dual-resistance limitation. The '522 patent’s claims recite no such limitation.

J. “plant” / “plants” / “first plant” ('246 patent, cls. 1, 3-4, 6, 8, 10-11; '434 patent, cls. 2-7, 9, 14-15; '363 patent, cls. 1, 5-9; '441 patent, cl. 2)

Asserted Patent	Corteva’s Construction	Inari’s Construction
“plant”		
'246/'434/'363/'441 patents	Plain and ordinary meaning, which is organism belonging to the kingdom Plantae	An event DAS59122 corn plant
		An event DP-004114-3 plant
		An event DAS81419 soybean plant
		An event DAS81419 soybean plant
“plants”		
'363 patent	Plain and ordinary meaning, which is organisms belonging to the kingdom Plantae	Event DAS81419 soybean plants.
“first plant”		
'363 patent	Plain and ordinary meaning, which is first organism belonging to the kingdom Plantae	An event DAS81419 soybean plant

Inari argues that “plant” has a different meaning across the Asserted Patents, and even across different claims of each patent. It does not advance any tenable lexicography argument, much less explain how Corteva expressly redefined “plant” differently for different patents/claims.

Claim terms “[are] presumed to have the same meaning throughout all of the claims in the absence of any reason to believe otherwise.” *Digital-Vending Servs. Int'l, LLC v. Univ. of Phoenix, Inc.*, 672 F.3d 1270, 1275 (Fed. Cir. 2012).

Regarding the ’434 patent, Inari contends that “the first inbred corn line in claim 21...must be corn event DP-004114-3.” D.I. 239 (Answering Br.) at 21. “[F]irst inbred corn line” does not even include the word “plant.” Claim 25 demonstrates that Inari’s construction is wrong. That claim involves producing hybrid corn by backcrossing a second-generation plant to “the parent **plant** that lacks the corn event DP-004114-3 DNA.” Applying Inari’s construction results in nonsense: the parent “plant” cannot be “[a]n event DP-004114-3 plant” and “lack[] the corn event DP-004114-3 DNA.” *See also* D.I. 209-2, cl. 5 (substituting Inari’s construction yields circularity: “A corn **[a]n event DP-004114-3 plant** comprising the genotype of the corn event DP-004114-3...”).

Inari argues that “plant” in the ’246 patent should be construed as “[a]n event DAS59122 corn plant.” But claim 1 recites “plant,” meaning, under Inari’s construction, that dependent claims would also need to cover DAS59122. Claim 2, however, does not cover DAS59122. It recites SEQ ID:24, which the patent describes as “the DNA molecule **used to transform** maize line DAS-59122-7 and **represents insert PHI 17662A.**” D.I. 209-3, SEQ ID:24. SEQ ID:24 is **not** DAS59122. It differs by at least twenty-two nucleotides at the 5’-end and twenty-five nucleotides at the 3’-end, with two differences in the middle. Ex. HH (Sequence comparison) at 7-8, 17, 24-25; D.I. 209-3, 28:32-40. Claim 1’s “plant” cannot be construed as “[a]n event DAS59122 corn plant” if claims that depend from claim 1 do not cover DAS59122.

For the ’363 and ’441 patents, Inari proposes “plant” to mean “[a]n event DAS81419 soybean plant.” But Inari fails to acknowledge that these patents nowhere include the term

“DAS81419.” “81419” is used to describe primers. *E.g.*, D.I. 209-5 ('363 patent), 5:20-27, Tables 3-4, Example 3.1, SEQ IDs:5-7. It would be impossible for Corteva to have redefined “plant” in the '363 and '441 patents to mean “[a]n event DAS81419 soybean plant” without having mentioned “DAS81419.”

Inari attempts to scrub this inconvenient fact by altering its construction, arguing that the intrinsic evidence “compel[s]” the terms “be construed as *soybean event 9582.814.19.1 plants.*” D.I. 239 (Answering Br.) at 22. This injects redundancy and nonsense into the claims. Inserting Inari’s construction into claim 6, for example, introduces redundancy because, according to Inari, “SEQ ID NO:14...is the sequence of soybean event 9582.814.19.1.” *Id.* Applying Inari’s construction yields:

A method of breeding a soybean *soybean event 9582.814.19.1 plant*, said method comprising: crossing a *soybean event 9582.814.19.1 plant* with a second soybean *soybean event 9582.814.19.1 plant*, to produce a third soybean *soybean event 9582.814.19.1 plant*, said *soybean event 9582.814.19.1 plant* comprising DNA comprising SEQ ID NO:14; and assaying said *third soybean soybean event 9582.814.19.1 plant* for the presence of SEQ ID NO:14.

It also makes no sense. As reflected in the blue-highlighted language, the latter portion of the claim requires assaying a “plant” for SEQ ID:14 (*i.e.*, what Inari says defines 9582.814.19.1). But Inari offers no reason why a skilled person would do that if, as Inari posits, the third “plant” must be a “soybean event 9582.814.19.1 plant.” The third “plant” in claim 6 is obtained by crossing a first plant, required to have SEQ ID:14, with a second plant that is not. The progeny-third plant is not necessarily the same as its parents, which is why the claim tests the third plant for SEQ ID:14.

K. “seed” (’246 patent, cls. 6, 8, 12-13; ’522 patent, cl. 13; ’434 patent, cls. 6, 8-9, 14-15; ’363 patent, cls. 7-8; ’441 patent, cl. 2)

Corteva’s Construction	Inari’s Construction
Plain and ordinary meaning, which is ripened ovule of a flowering plant that may develop into a new plant	Plain and ordinary meaning, which is a seed coat, food store, and plant embryo

Corteva’s construction is supported by a common-dictionary definition of “seed” that is consistent with a technical-dictionary definition and accords with the intrinsic evidence. D.I. 208 (Opening Br.) at 22. Inari relies on an article that post-dates the patent applications by roughly a decade or more and does not mention the term “food store” from Inari’s construction. D.I. 240-16. Inari claims, without evidence, that “[a] ‘ripened ovule of a flowering plant’ as proposed by Corteva is the same as a ‘plant embryo’ proposed by Inari.” D.I. 239 (Answering Br.) at 23. If Inari believes that, it is welcome to adopt Corteva’s construction.

To the extent Inari does not, Corteva disagrees that the correct construction of “seed” should include the term “plant embryo.”³ Inari argues that “a plant embryo is a tiny plant that has a root, a stem, and one or more leaves.” *Id.* That explanation is inconsistent with the intrinsic evidence, which characterizes embryos as “[p]arts of transgenic plants,” not “tiny plant[s]” themselves. D.I. 209-3, 11:19-22; D.I. 209-2, 11:1-4.

Inari contends that its construction is “more accurate in that encompasses [sic] the additional parts of the seed—seed coat and food store.” D.I. 239 (Answering Br.) at 23. But Corteva’s construction “more accurate[ly]” conveys a structure (“ripened ovule”), its origin (“a flowering plant”), and what it has the potential to do (“develop into a new plant”). The difference is that Corteva’s construction is consistent with the intrinsic evidence (D.I. 208 (Opening Br.) at

³ Inari asserts that the parties’ constructions “agree that a seed is the initial stage of a plant” *Id.* That is not what Corteva’s construction says.

22) and Inari's construction includes terms ("seed coat" and "food store") found nowhere in the Asserted Patents.⁴

III. CONCLUSION

Corteva respectfully requests the Court adopt its constructions.

⁴ Inari argues that claims reciting "wherein said plant is a seed" confirm that "a seed is generally considered to be a plant." D.I. 239 (Answering Br.) at 23. That is illogical. The fact that this claim is required shows that the patentee expressly wanted to cover the case of a "seed" where a seed might not otherwise be considered a plant itself. And these claims appear in only one of the Asserted Patents.

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CERTIFICATE OF COMPLIANCE

The undersigned certifies that Plaintiffs' Reply Claim Construction Brief complies with the type-volume limitations pursuant to the Scheduling Order at D.I. 49 because said Brief contains 4,951 words. The Brief was prepared using Microsoft Word for Microsoft 365.

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